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REMARKS

Applicants wish to express their thanks and appreciation for the courtesies kindly granted by the Examiner during the interview conducted at the United States Patent & Trademark Office on September 3, 1981.

At the interview, Applicants agreed to amend Claim 48 as suggested by the Examiner in his last Action--this has been done as set forth above.

With regard to the rejection of Claim 53 (rewritten for convenience and clarity as new Claim 59) under 35 U.S.C. §112, as agreed at the interview, to overcome the objections of indefiniteness and ambiguity, Applicants have amended the pre-characterizing portion of the claim to delete the word "circular" and to delete the word "translational" to remove any question of raising a new issue. Additionally, as also agreed at the interview, Applicants amended the improvement characterizing portion of the claim to further define the specific manner in which Applicants' claimed improvement overcomes the prior art problems associated with the Oxford Knee; namely relatively small engagement height of the bearing insert means (note FIG. 38C, specification at page 32, lines 4-16 and paragraph (c) of new Claim 59). Accordingly, it is submitted that Claim 53 as rewritten (new Claim 59) satisfies 35 U.S.C. §112.

Further, with regard to Claim 53 (new Claim 59), after the interview and upon further study of the Goodfellow et al. Patent No. 4,085,466, Applicants became of the opinion that the functional recitation of paragraph (c)(i) regarding Applicants' bearing insert as being permitted to be non-circular, larger in

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size, etc., was present in the Goodfellow et al. patent and hence, as may be noted above, this recitation has been deleted from new Claim 59.

With regard to the rejection of Claims 54, 55, 56 and 58 as being unpatentable over Murray et al. ('697) under 35 U.S.C. §103, at the interview Applicants pointed out that the prosthetic joint of Murray et al. includes neither a teaching nor a suggestion of any "means for constraining motion of an intermediate tibial bearing component (or a pair thereof) during joint articulation to a predetermined path relative to the tibial platform." Further, Applicants pointed out that Applicants' prosthetic joint includes such means and thereby permits the functional improvements recited in the rejected claims which function also is neither taught nor suggested by Murray et al. As agreed at the interview and to better define over Murray et al., Applicants have amended these claims to further recite such means. Accordingly, it is respectfully submitted that Claims 54, 55, 56 and 58 are allowable under 35 U.S.C. §103 over Murray et al.

With further regard to Claims 54, 55 and 58, these claims were originally drafted to define Applicants' invention and to distinguish over the prior art known to Applicants by reciting, inter alia, that Applicants' improved prosthetic joint functionally provides "unconstrained" anterior-posterior shift and "unconstrained" axial rotation. Subsequently, the Examiner cited Murray et al. against these claims and Applicants argued that such functional recitations also distinguished patentably over the Murray et al. reference. The Examiner, of course, disagreed and at the interview

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Applicants, to better distinguish over Murray et al., agreed to amend these claims to recite that Applicants' claimed outwardly curved track(s) are, "for constraining motion of an (or a pair of) intermediate tibial bearing component(s) during joint articulation to a predetermined path relative to the tibial platform." -- it being noted at the interview that the prosthetic joint of Murray et al. does not provide such function. Having so defined patentably over Murray et al., Applicants have deleted the term "unconstrained" from these claims since it was found by the Examiner not to impact patentably upon the claims vis-a-vis Murray et al. and to broaden the claims to give Applicants the scope of protection to which Applicants believe themselves to be entitled vis-a-vis Murray et al. and the other prior art.

With regard to Claim 57, previously indicated as being allowable if rewritten in proper independent form, this claim has been amended to make its depending language compatible with amended Claim 56 on which it depends.

At the interview, Applicants further pointed out the manner in which their invention as defined by various of the claims is distinct from the disclosure of the Goodfellow patent, and as requested by the Examiner, Applicants make of record the following statement of such distinctiveness. The structure as recited in Claims 54-58 is distinct from the structure shown in Goodfellow in FIG. 3 and described in the specification of Goodfellow's Patent No. 4,085,466 in Col. 6, lines 37-46. FIGS. 1 and 2 in the Appendix to this Amendment illustrate the embodiment described by Goodfellow in greater detail.

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FIG. 1 is a lateral view and FIG. 2 is a superior view of Goodfellow's meniscal bearing component 31 and D-shaped platform 21 of tibial component 20. The embodiment shown in FIGS. 1 and 2 illustrates the elongated oval form of the meniscal component described by Goodfellow in lines 37-40. The D-shaped platform contains the raised sidewall 26 described by Goodfellow in lines 44 and 45 of Col. 6. In FIG. 2, the solid oval represents a typical central orientation of the oval shaped meniscal component and the phantom line oval represents a rotated position of the oval meniscal component. Here, assuming that the center of the oval meniscal component is held in the position shown by the action of the femoral component, the meniscal component can spin until the edge strikes the side wall 26 thus limiting the rotation of the meniscal component.

It may be seen that this structure allows the meniscal component to move in the plane of the D-shaped platform in any direction and with any angular orientation except as limited by the side wall 26. It may be seen that the meniscal component 31 can move slightly medially and any amount laterally alone or in combination with motion either anterior or posterior. Thus, there is no means present in the tibial component and meniscal bearing component which limits the motion of these two components to a predetermined path.

Now with respect to Claim 59 (rewritten Claim 53), the structure recited in Claim 59 is distinct from Goodfellow since as stated in the specification of Goodfellow et al., in Col. 6, lines 37-44, the side wall is intended "to limit the extent to

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which the meniscal component can spin" and is not intended to prevent rotation of the meniscal component. Furthermore, examining FIG. 2 of the Appendix, one can see that no means is present in the structure described by Goodfellow that would prevent rotation of the meniscal component independent of anterior-posterior sliding movement of the bearing insert means relative to the tibial platform means. Thus, it is clear that the structure taught by Goodfellow does not prevent rotation independent of anterior-posterior sliding movement between the meniscal component and tibial component as required in Claim 59 which has been written to recite that Applicants' claimed "track means for preventing rotation of the bearing insert means relative to the tibial platform means independent of 'anterior-posterior' sliding movement of the bearing insert means relative to the tibial platform means thereby"

It is submitted that the amendatory language "anterior-posterior" raises no new issue because such language merely further restricts the broader recitation of "sliding movement" which is unrestricted or silent as to direction of sliding movement and which broader recitation has, of course, already been searched.

Applicants have added new Claims 60 and 61 to provide them with the further scope of protection to which they believe themselves to be entitled. It will be noted that new Claim 60 is a dependent claim depending on and further limiting Claim 4, previously found to be allowable, and that newly added Claim 61 is a dependent claim depending upon and further limiting independent Claim 23, previously found to be allowable, and

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that the structure recited by the newly added claims is based upon that shown in FIG. 55 and described in detail in Applicants' originally filed specification at page 39, lines 20-24. Hence, newly added claims 60 and 61 merely further restrict broader recitations which have already been searched and hence do not raise any new issue. Since the independent claims upon which these newly added claims dependent have been found to be allowable it is respectfully submitted that the newly added dependent claims are allowable and, it is further noted, that the specific structure recited by these newly added dependent claims is neither to be found nor suggested in the prior art.

Accordingly, allowance of this application as amended is respectfully requested.

Respectfully submitted,

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